

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows by inserting the underlined matter and deleting the matter lined through.

[0001] This application is a continuation-in-part of U.S. Patent Application Serial No. 10/046,767 filed January 17, 2002, now abandoned.

[0014] The elongated body of the airway defines an open-ended passage extending through the length of the body and being open at the proximal and distal ends of the elongated body. A front conduit segment or nipple extends beyond the radially extending member, with its opening that is approximately coextensive with the open-ended passage. A second conduit segment is positioned between the nipple and the radially extending protrusion so that it will be located outside the patient's mount mouth. The second conduit segment extends approximately radially from the elongated body with its passage formed in a T-shaped intersection with the passages of the nipple and the elongated body. The T-shaped intersection of the passages is of larger breadth and volume than the open ended passage of the elongated body of the airway. The T-shaped intersection forms a plenum outside of the patient's mouth for the accumulation of the exhaled breath of the patient. This larger plenum chamber can accumulate the breath at the end of the respiratory cycle at the proximal end of the airway and progressively feed the end tidal to the monitor at the rate induced by the monitor for a more even measurement of the carbon dioxide or other gas to be detected and measured. The placement of the plenum at the nipple end of the airway allows the airway to include the plenum without increasing the external breadth of the airway that extends into the throat, thereby keeping the external breadth of the elongated body of the airway as small as practical.

[0024] The elongated body 14 includes a proximal straight section 16 and a distal arcuate section 18. A pair of opposed, spaced, longitudinally extending parallel ribbon-like flange elements 20 and 22 are formed on opposite surfaces of conduit 24. An internal, open-ended passage 26 (Fig. 4) extends throughout the length of the elongated body 14. The passage 26 terminates in open end 28, with side ports 30_29 opening to the side of the conduit 24 at its distal end.

[0025] The flanges 20 and 22 protrude laterally of the conduit 24, and are sized and shaped to engage the facing surfaces of the throat of the patient, so that the throat surfaces and the flanges, together with the external surface of the conduit 24, form external air passages 28_27 about the elongated body, so that the patient has open air passages to the outside along the entire length of the elongated body 14.

[0026] The proximal end 16 of the elongated body 14 terminates in radial protrusions 30 that are formed by a pair of radially extending flanges. This forms a rest for the airway, to rest against the lips of the patient when the patient is intubated with the airway, as shown in Fig. 1.

[0035] In operation of the oro-pharyngeal airway 12, the device is inserted into the patient's mouth until the curved distal section 18 extends through the back of the patient's throat, adjacent the pharynx. In the meantime, the radial protrusion 30, in the form of oppositely extending flanges, comes to rest against the exterior of the patient's mouth, avoiding inadvertent movement of the proximal end further into the mouth of the patient. The flanges 20 and 22 engage the facing surfaces of the patient's throat, forming the air passages or-channels 28. Since the flanges 20 and 22 extend along the entire length of the airway, the air passages formed on opposite sides of the elongated body will

not be interrupted by any of the functions that are carried on internally of the airway. The patient is then able to breathe through the channels 28 that extend along the exterior of the conduit 24 of the elongated body 14.

[0037] When it is necessary to perform a throat evacuation to remove fluid, mucus, blood, etc. from the throat, a flexible tubular conduit represented by the dash lines 50_47 of Fig. 1, is frictionally engaged over the converging conduit section 32 of the airway. The suction pump apparatus 44 is connected to the distal end of the flexible tube and is operated to create a mild suction within the passage 26 of the airway 12, withdrawing such fluids from the patient's throat. This can be performed without removing the suction airway 12 from the patient's mouth.

After Paragraph 00018, insert the following paragraphs:

In general, the invention includes a method of monitoring the carbon dioxide of a patient's breath while the patient is under general anesthesia. This includes intubating the patient's throat with an airway having an air conduit extending therethrough and extending from the mouth of the patient to the larynx of the patient, while maintaining an air passage between the airway and the facing surfaces of the patient's throat to permit the patient to breathe about the airway. Breath is withdrawn from about the larynx of the patient through the air conduit of the airway to a carbon dioxide monitor, and a carbon dioxide monitor is used for monitoring the carbon dioxide content of the patient's breath as it is withdrawn from about the larynx of the patient.

Another feature of the invention may include the step of injecting a gas through the air conduit extending through the airway to the larynx, and wherein the step of

withdrawing breath from about the larynx of the patient comprises intermittently withdrawing the breath. The step of injecting gas to the larynx may include intermittently injecting gas, and wherein the steps of withdrawing breath and injecting gas are performed alternately.

The step of injecting gas through the air conduit may include moving the gas through the first nipple that is coextensive with the air conduit, and the step of withdrawing breath from about the larynx comprises moving the breath through the second nipple that intersects the air conduit.

The step of withdrawing breath from the patient may include attaching one end of a flexible open-ended tube to the airway in communication with the air conduit and extending the other end of the open-ended tube to a carbon dioxide monitor.

The step of withdrawing breath from the larynx comprises moving the breath from the larynx to a plenum chamber in the airway and then moving the breath from the plenum chamber to the monitoring device.

Also, the airway is characterized by having been formed of polymer material by simultaneously feeding polymer material and nitrogen gas into the cavity of a mold so that the nitrogen gas pushes the polymer material against the cavity walls of the mold so that the polymer material forms the airway.